



# Replacement Sheet













4000

4100

Siemens Safety Integrated Acceptance Test		Introduction					
List of Tests <input checked="" type="checkbox"/> Overview <input type="checkbox"/> Pulse Disable Path <input type="checkbox"/> External Stops <input type="checkbox"/> SPL Inputs/Outputs <input type="checkbox"/> Wiring Cross Check <input type="checkbox"/> Emergency Stop <input type="checkbox"/> Functional Relationships <input type="checkbox"/> (SBH) Safe Oper. Stop <input type="checkbox"/> (SG) Safe Speed <input type="checkbox"/> (SE) Safe Software Limit <input type="checkbox"/> Finished	Welcome to Siemens Safety Integrated Acceptance Test This wizard provides assistance for performing tests and preparing the Acceptance Test Report.						
	Machine designation:	4410	<input type="text"/>				
	Machine type:	4420	<input type="text"/>				
	Serial No.:	4430	<input type="text"/>				
	Manufacturer:	4440	<input type="text"/>				
	PLC version manufacturer:	4450	<input type="text"/>				
	Ultimate customer:	4460	<input type="text"/>				
	Name of tester:	4470	<input type="text"/>				
	Series machine startup	4480	<input type="checkbox"/>				
	Uses "Safe programmable logic."	<input checked="" type="checkbox"/> 4490					
4200		4300	4350	4500			
<input type="button" value="Previous Page"/>		<input type="button" value="Next Page &gt;"/>		4700	4600	<input type="button" value="Exit"/>	<input type="button" value="Help"/>

Fig. 4

4200

List of Tests	
	 Overview
	 Pulse Disable Path
4210	✓ Test 1
	 External Stops
4220	✓ Operator Door
4230	✗ Tool Chain Door
	 <b>Test 3</b>
	 SPL Inputs/Outputs
	 Wiring Cross Check
	 Emergency Stop
	 Functional Relationships
	 (SBH) Safe Oper. Stop
	 (SG) Safe Speed
	 (SE) Safe Software Limit
4290	 Finished

**Fig. 5**

# Replacement Sheet

6000

Siemens Safety Integrated Acceptance Test		Summary
<b>List of Tests</b> <input type="checkbox"/> Overview <input type="checkbox"/> Pulse Disable Path <input type="checkbox"/> External Stops <input type="checkbox"/> SPL Inputs/Outputs <input checked="" type="checkbox"/> <b>Wiring Cross Check</b> <input type="checkbox"/> Emergency Stop <input type="checkbox"/> Functional Relationships <input type="checkbox"/> (SBH) Safe Oper. Stop <input type="checkbox"/> (SG) Safe Speed <input type="checkbox"/> (SE) Safe Software Limit <input type="checkbox"/> Finished	<b>Test of Wiring Cross Check</b> This test verifies that appropriate alarms are generated when one channel of a SI signal is disconnected  <div> <b>Warning</b>            Protection of operating personnel must be given top priority when safety functions are configured and tested.         </div> <div> <b>Purpose</b>            This test verifies that wiring problem detection of a safety relevant signal is cross checked. If a wiring problem occurs, the appropriate alarm should be generated.         </div> <div> <b>Procedure</b>            Press the "Begin This Test" button and then disconnect a channel of a safety relevant input signal. An example test involves disconnecting one input signal to the protective door/ light barrier. All alarms generated during the test appear in a list. Check the alarms that you wish to include in the report and uncheck the rest. A checkbox is provided for verifying that the appropriate alarms occurred. Repeat the test for all Safety Integrated         </div> <div> <input type="checkbox"/> This test is not applicable to this machine         </div>	<div> <b>Begin This Test</b> </div> <div>6370</div> <div>6360</div> <div>6350</div>
<div> <div>&lt; Previous Page</div> <div>Next Page &gt;</div> </div>		<div> <div>Exit</div> <div>Help</div> </div>

Fig. 6

7000

**Fig. 7**

**Fig. 7**

# Replacement Sheet

8000

Siemens Safety Integrated Acceptance Test							
<b>List of Tests</b> <input type="checkbox"/> Overview <input type="checkbox"/> Pulse Disable Path <input type="checkbox"/> External Stops <input type="checkbox"/> SPL Inputs/Outputs <input checked="" type="checkbox"/> Wiring Cross Check <input checked="" type="checkbox"/> Disconnected Input <input type="checkbox"/> Emergency Stop <input type="checkbox"/> Functional Relationships <input type="checkbox"/> (SBH) Safe Oper. Stop <input type="checkbox"/> (SG) Safe Speed <input type="checkbox"/> (SE) Safe Software Limit <input type="checkbox"/> Finished	<b>Test of Wiring Cross Check</b> The test is complete. Please provide a description of the test and indicate success or failure.						
	<table border="1"> <tr> <td>Test Trigger Condition:</td> <td>Verify Alarms List</td> <td>Repeat This Test</td> </tr> <tr> <td>Disconnected Input I32.7</td> <td>           Alarm 5011            Alarm 5028            Alarm 5034            Alarm 5022         </td> <td>Delete Test Results</td> </tr> </table>		Test Trigger Condition:	Verify Alarms List	Repeat This Test	Disconnected Input I32.7	Alarm 5011 Alarm 5028 Alarm 5034 Alarm 5022
Test Trigger Condition:	Verify Alarms List	Repeat This Test					
Disconnected Input I32.7	Alarm 5011 Alarm 5028 Alarm 5034 Alarm 5022	Delete Test Results					
<input checked="" type="radio"/> Click here if the expected reaction occurred and the expected alarms appear. <input type="radio"/> Click here if the expected reaction did NOT occur or the expected alarms did NOT appear.							
8350							
<table border="1"> <tr> <td>&lt; Previous Page</td> <td>Next Page &gt;</td> <td>Exit</td> <td>Help</td> </tr> </table>			< Previous Page	Next Page >	Exit	Help	
< Previous Page	Next Page >	Exit	Help				

Fig. 8

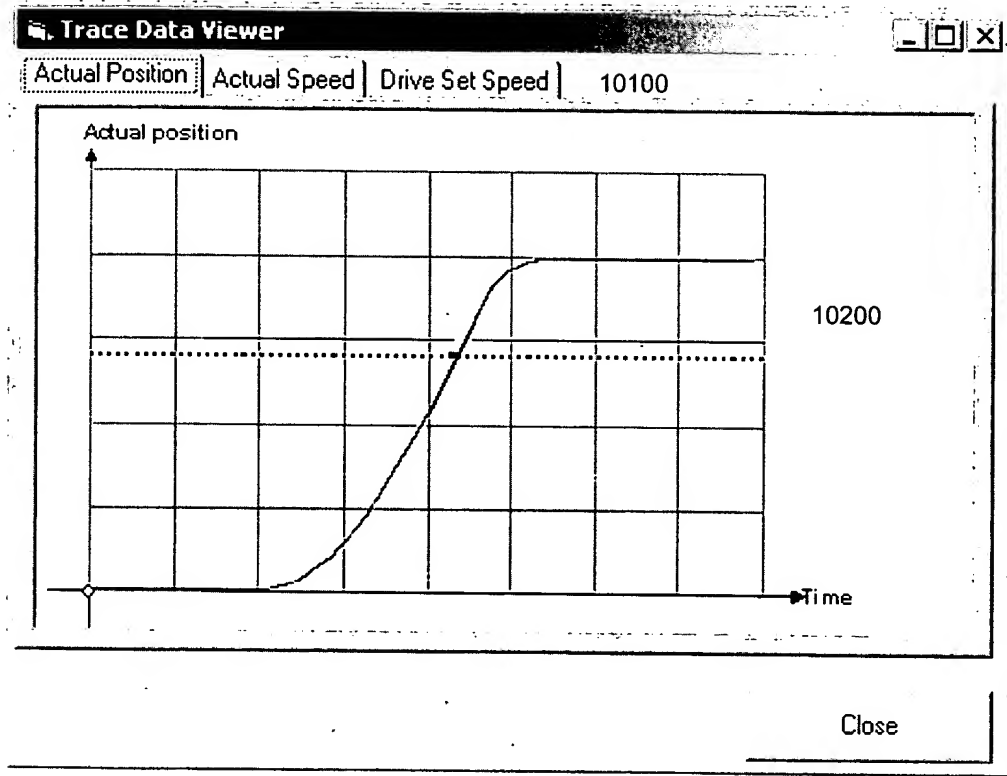
9000

<b>Siemens Safety Integrated Acceptance Test</b>		<div style="display: inline-block; border: 1px solid black; padding: 2px;"> </div>											
<b>List of Tests</b> <div style="margin-top: 10px;">  Overview   Pulse Disable Path   External Stops   SPL Inputs/Outputs   Wiring Cross Check   Emergency Stop   Functional Relationships   (SBH) Safe Oper. Stop  <div style="margin-left: 20px;">✓ Axis X1 +</div>  (SG) Safe Speed   (SE) Safe Software Limit   Finished </div>	<div style="border-bottom: 1px solid black; margin-bottom: 10px;"> <b>Test of SBH (Safe Operational Stop) Reaction</b>  The test is complete. Please provide a description of the test and indicate success or failure. </div> <div style="display: flex; justify-content: space-between;"> <table border="1" style="width: 60%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Description</th> <th style="text-align: left; padding: 5px;">Data</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Axis/Spindle Name</td> <td style="padding: 5px;">Axis X1</td> </tr> <tr> <td style="padding: 5px;">Direction</td> <td style="padding: 5px;">Pos</td> </tr> <tr> <td style="padding: 5px;">Speed exceeded</td> <td style="padding: 5px;">71 mm/min</td> </tr> <tr> <td style="padding: 5px;">Reaction Time</td> <td style="padding: 5px;">0.5334 s</td> </tr> <tr> <td style="padding: 5px;">Overtravel</td> <td style="padding: 5px;">5.795 mm</td> </tr> </tbody> </table> <div style="width: 35%; text-align: center; padding: 10px;"> Repeat This Test for Another Axis    Delete Test Results </div> </div> <div style="margin-top: 10px;"> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%; border: 1px solid black; padding: 5px;"> <b>Test Trigger Condition:</b>  Movement with adjusted traversing profile while SBH was active </div> <div style="width: 45%; border: 1px solid black; padding: 5px;"> <b>Test Alarms</b>  Alarm 27011  Alarm 27022  Alarm 300908  Alarm 300914 </div> </div> <div style="margin-top: 10px;"> </div> <div style="margin-top: 10px;"> <input checked="" type="radio"/> Click here if operational stop error was properly handled.  <input type="radio"/> Click here if operational stop error was NOT properly handled. </div> <div style="margin-top: 10px;"> </div> <div style="text-align: right; margin-top: 10px;"> View Results Graphs </div>	Description	Data	Axis/Spindle Name	Axis X1	Direction	Pos	Speed exceeded	71 mm/min	Reaction Time	0.5334 s	Overtravel	5.795 mm
Description	Data												
Axis/Spindle Name	Axis X1												
Direction	Pos												
Speed exceeded	71 mm/min												
Reaction Time	0.5334 s												
Overtravel	5.795 mm												
<div style="display: flex; justify-content: space-between;"> <span>&lt; Previous Page</span> <span>Next Page &gt;</span> </div>		<div style="display: flex; justify-content: space-around;"> <span>Exit</span> <span>Help</span> </div>											

**Fig. 9**

# Replacement Sheet

10000



**Fig. 10**